servicenow

Predictive Analysis Dashboard

Participant Guide

Table of Contents

Session Length
60 minutes

Introduction

This participant guide provides an overview of the features and functionality of the Predictive Analysis Dashboard (PAD). This guide includes hands on practice activities that can be performed within the UAT environment.

What's in this lesson for me?

This material is for any SAM who wants to explore the following questions:

- ❑ What is the purpose and function of the Predictive Analysis Dashboard?
- ❑ What are the dashboard features?
- ❑ How do you navigate the dashboard?
- ❑ How do you analyze the dashboard data to inform clients?

Questions

If you have questions about this material, we are here to help. Contact your mentor or supervisor for assistance.

Using this Participant Guide

The following icons are used throughout this guide.


Key Information


Best Practice


Discuss with your mentor


Try It


Process Steps


Reflection Activity

Save this document to your computer for future reference. To begin, login to the UAT to complete the learning activities outlined in this Participant Guide.

Process Steps to login to the UAT:

1. Follow this link to access the UAT: https://stats-uat.servicenow.net/dashboard/sam-p1-prevention
2. Enter your LDAP username and password

The main page of the dashboard displays. Keep this view open as you complete the learning activities throughout this guide.

Continue to the next page.

Dashboard Overview

The PAD allows SAMs to be proactive and resolve potential issues before they escalate to P1.

The purpose of the Predictive Dashboard (PAD) is to display a collection of KPI metrics commonly used within Instance Health Monitoring. The PAD produces a proactive decision-making trend in one location for quick analysis and directive actions. It also provides color coded states determined by thresholds for a quick reference into the health of the widget.

The goal is:

- to provide proactive monitoring indicators on your accounts to maintain instance health
- to potentially reduce the number of P1's by catching issues before they are critical

Review the PAD several times a day to stay ahead of issues that may impact your customer.

It is a best practice to review the dashboard widgets' status periodically (several times a day). If the widget status indicator is not green, review other widgets to help determine what is causing the issue based on the status indicators. You are not required to deduce the cause but to collect enough information to determine if a case should be opened for review. When responding to an issue, make sure to follow the prescriptive action noted within each widget. You will learn more about the prescriptive action during this training.

Reflection Activity

Read each question and select the appropriate answer.

1. What is the purpose of the Predictive Analysis Dashboard?

- [ ] To display a collection of KPI metrics commonly used within Instance Health Monitoring
- [ ] To display time sensitive aggregation intervals for accounts in critical status
- [ ] To provide metric panels and weighted averages for long-term trending
- [ ] To help reduce the number of P1s by catching issues before they are critical

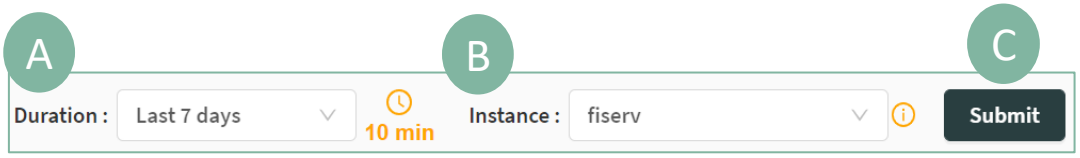
2. What steps should you take if the status indicator is not green?

- ◯ Review other widgets to determine the cause of the issue
- ◯ Collect information to determine if a case should be opened
- ◯ Follow the prescriptive action for each widget
- ◯ All of the above

Inputs

The duration menu, instance field, and submit button are located at the top of the dashboard.

Read the purpose and function of each input below.



A Duration

- This dropdown menu provides selectable duration options along with custom range capability.
- The duration determines the resolution of the data points displayed.
- Keep in mind that some widgets are independent of the duration and are defaulted to 90 days prior to the current date.

B Instance

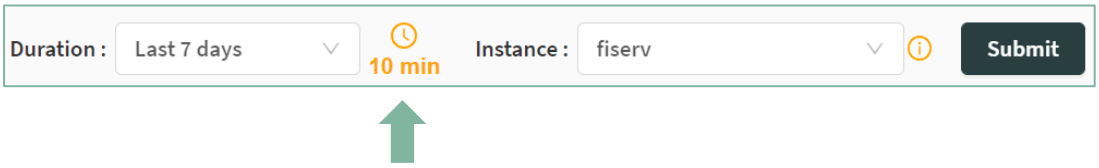
This is the logical instance name for review. Note sub-production instances may not display all widget information.

C Submit

- Selecting this will cause the system to populate the widgets for display based on the parameters chosen.
- The dashboard is configured to "lazy load" for performance reasons. This means some widgets may not populate until you scroll them into view.

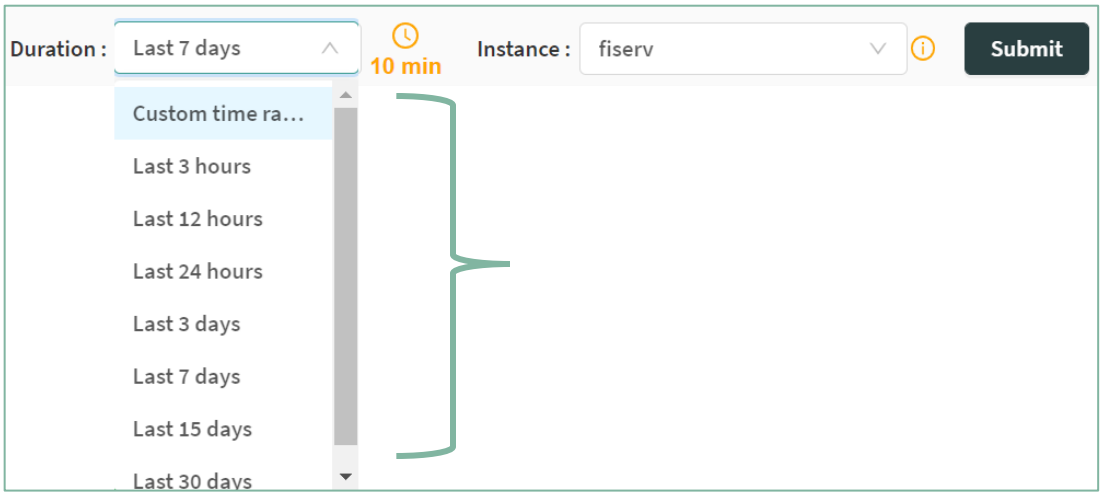
Click the Reload icon to check the latest results.

The **Datapoint Resolution** identifier is located next to the duration option.



Based on the duration, the data collected will be displayed in this resolution on the graph below it and will apply to the threshold in the same resolution. The resolution will grow based on the duration selected for performance.

Continue to the next page.



The number of datapoints that are collected is based on the length of the duration and requires averaging to the resolution. For example, a one-minute resolution means the datapoints will be displayed one minute apart. A five-minute duration means that the data points are averaged in five-minute intervals for display.

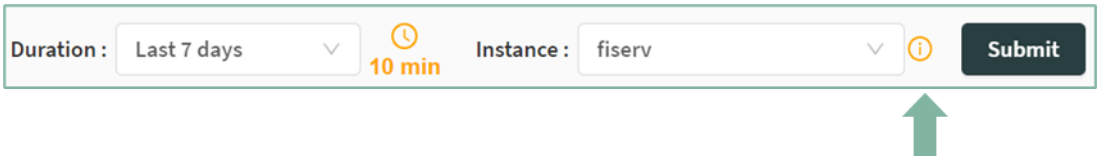
Resolution — Duration
1 min (0 – 12 hours)
5 min (12+hours – 3 days)
10 min (3+days – 7days)
30 min (+7days)

Try It

In the UAT:

1. Open the Duration dropdown menu.
2. Select the last 3 days.
3. Then click Submit.
4. Notice the changes that display on the dashboard.

The **Instance Attributes Information** icon is the circle-i link next to the instance field.



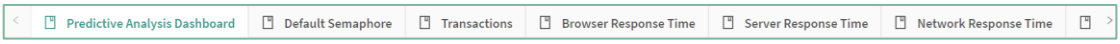
Selecting this will display relevant information about the instance.

Continue to the next page.

Do not select the back-arrow icon on the website browser. Most navigation is performed within the dashboard areas.

Dashboard Characteristics

Dashboard tabs are located at the bottom of the dashboard and provide links to the different breakout views of the widget. To return to the main page, select the appropriate tab at the bottom of the screen.



Main Page

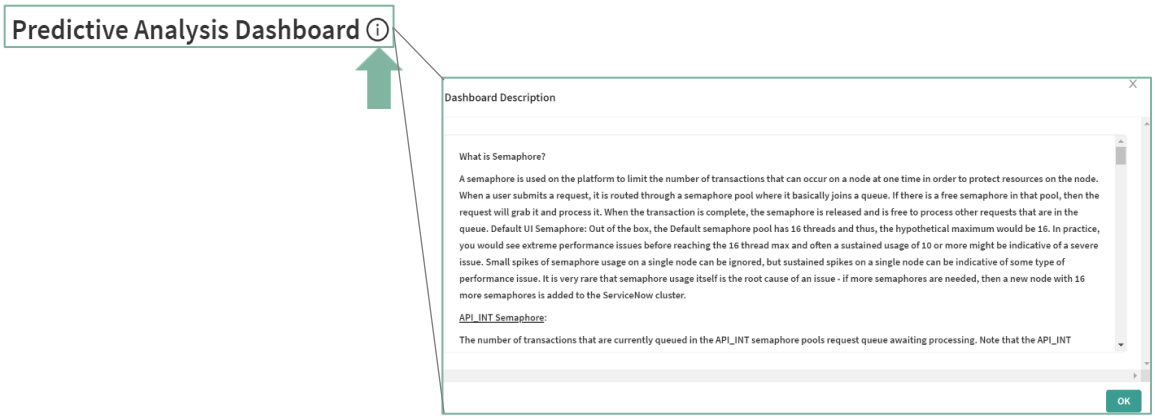
In most cases, when the dashboard redirects to a breakout view, it is linked to one of these tabs.

Try It

In the UAT:

1. Select a duration of 12 hours.
2. Select an instance then click Submit
3. Locate the breakout views at the bottom of the screen
4. Open each tab to view the breakout options.
5. When you are finished return to the main dashboard page.

Dashboard Information and direction icons provide information, prescriptive measures, actions, instructions, and definitions where applicable. They are located throughout the site to provide information. For example, the information link next to the dashboard title provides descriptions of each of the widgets, relevant site information and helpful links.

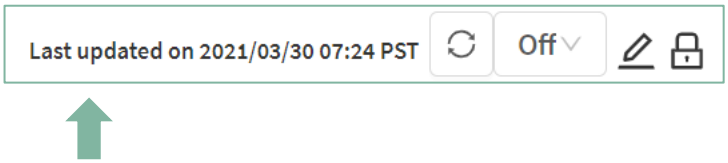


Try It

In the UAT:

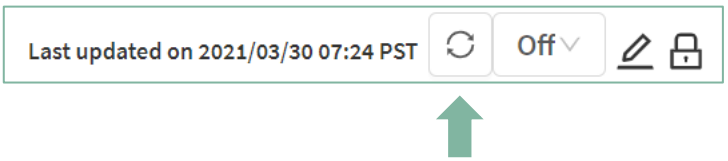
1. Locate the information link icon
2. Select the icon to open the Dashboard Description
3. Scroll through the list and read the descriptions for each widget.

The **Last updated** message is the text displayed at the top right of the dashboard.



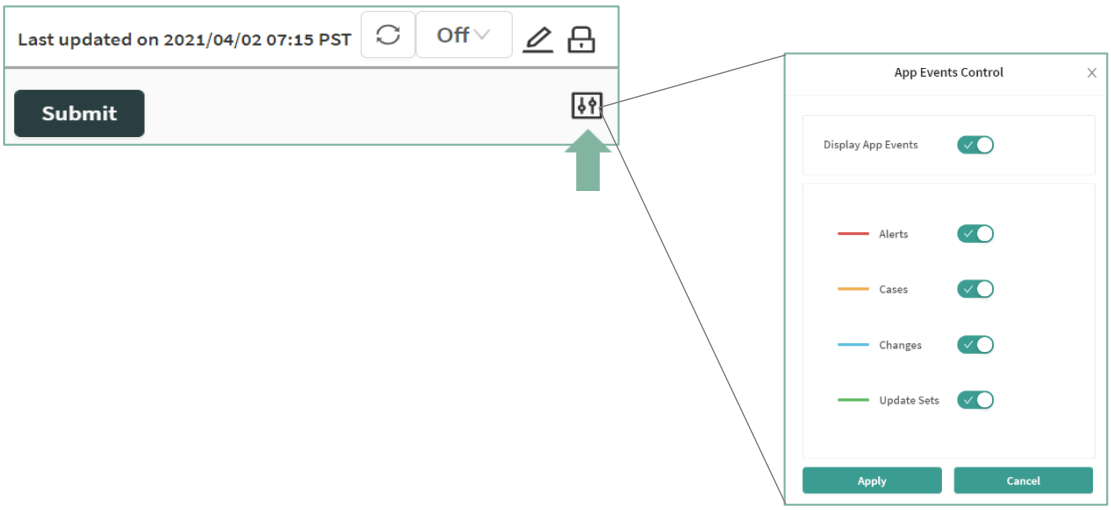
The date and time represent when the displayed data was last collected. The data collection has a delay of ~15-30 minutes between collections.

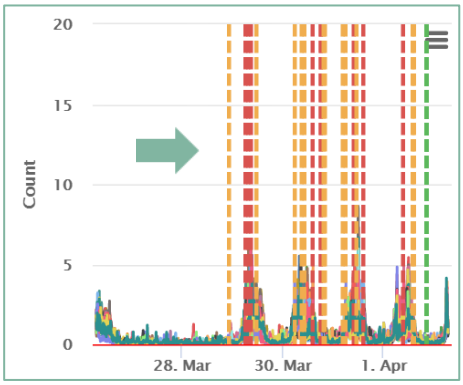
The **Reload** icon will reload the page and check for new content.



Continue to the next page.

The **Event Control** icon allows you to configure event characteristics that you want to see on the graphs (i.e. Alerts, Cases, Change and Update Sets).





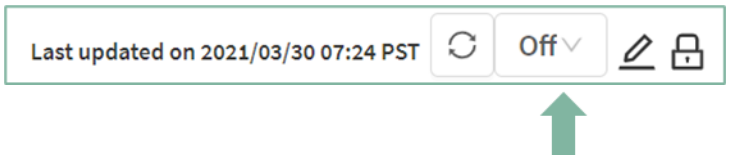
They will appear on the widget in the graph section as a vertical dotted line representing when the event took place. This is used to help correlate against the metrics for evaluation.

Try It

In the UAT:

1. Select the Event Control icon.
2. Turn off the Alerts and Changes settings.
3. Click Apply.
4. Notice the changes that display on the dashboard widgets.

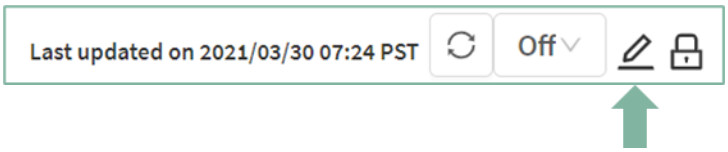
The **Auto-Update** setting will allow the page to refresh automatically based on the selection.



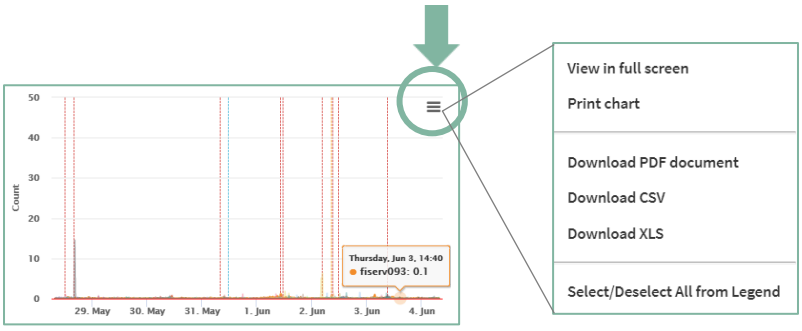
Only administrators will be allowed to save edits.

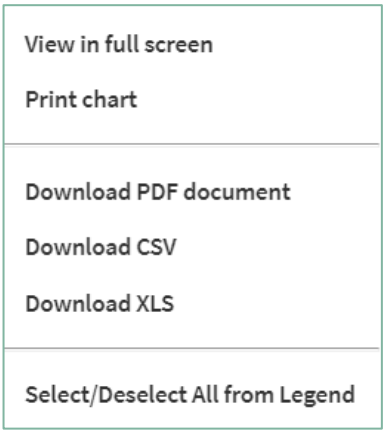
The default is set to Off. Please use this sparingly as it does take resources to regenerate the page.

The **Edit** icon will open the dashboard in edit mode.



The **Chart Context Menu** icon is in the graph section of the widgets. When selected, this will display action choices for viewing, printing, downloading and displays.





View in full screen displays the graph in full screen mode. Press the escape key to return to the normal display.
Print chart sends the current chart to the printer queue.
Download options will download the data from the graph in the format chosen for further evaluation.
Select/Deselect All from Legend turns the graph data on or off.

Try It

In the UAT:

1. Select the Chart Context menu icon on one of the widgets.
2. Select the View in full screen option.
3. Use the breakout views at the bottom of the screen to return to the main page.
4. Now return to the Chart Context menu and select Download to PDF.
5. Open the PDF and view the data.
6. Return to the main page when you are finished.

Continue to the next page.

Widget Characteristics

Widgets display a particular metric/KPI for analysis.

States

The conditional **state** of the widget is based on a set threshold. The state is identified by colors and the condition is indicated by changing the title of the widget to one of these colors. See the examples below:

Green – The state of that metric (widget) is within the threshold and is performing under normal parameters.

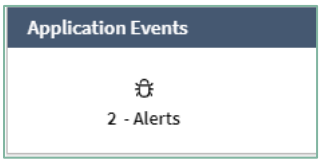
Yellow - The state of that metric (widget) triggered the threshold for a yellow or medium warning that requires attention. You will need to look to see if the data is trending towards a potential issue.

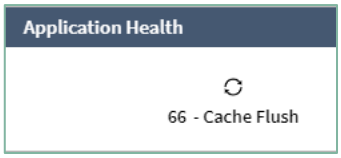
Red - The state of that metric (widget) triggered the threshold for red or high warning that requires attention. A high state indicates that the metric could be reaching a critical performance level and needs to be reviewed for trending ASAP.

Non-State Widgets

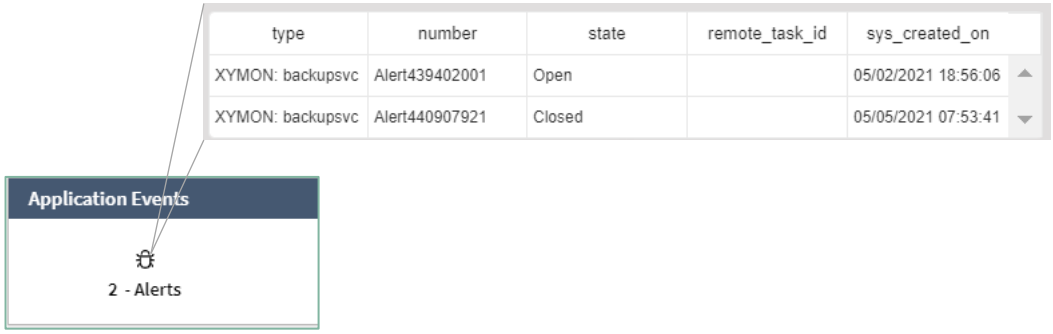
Non-state widgets are widgets that do not have a state or color threshold control. They typically provide overall information and are sometimes used to support the investigation of a state widget that is under concern.

The Application Events and Application Health widgets fall under this category. They do not contain a threshold nor change color.





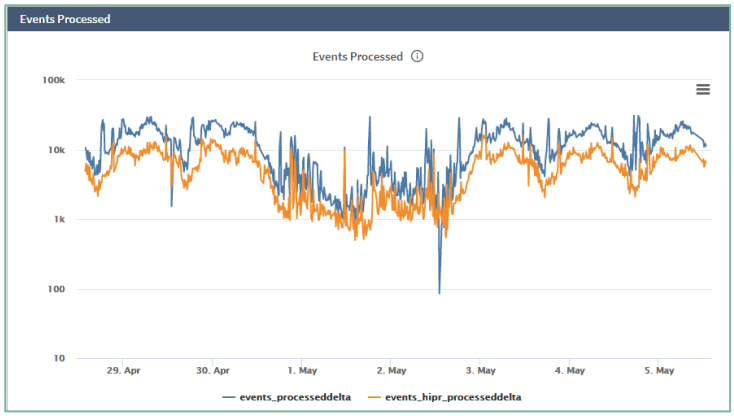
When hovered over, they display a subset of information used in analysis of the instance or situation.



If you select one of the metrics in the widget, you will be redirected to a breakout view of the metrics.

Some widgets do not have a state/color and are informational. They typically support the investigation into the state of the widget.

For example, the Events Processed is an informational widget that supports the Backlog widget.

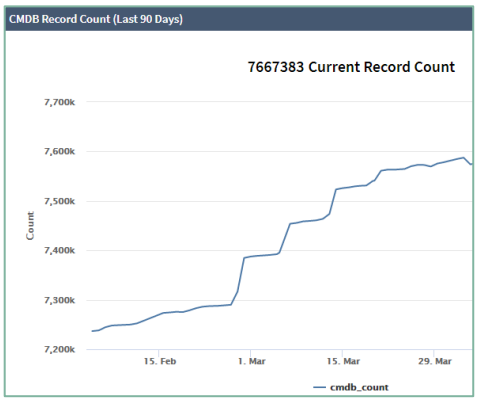


Events Processed represents HIPR events. It excludes the text index, metric updates and the report view.

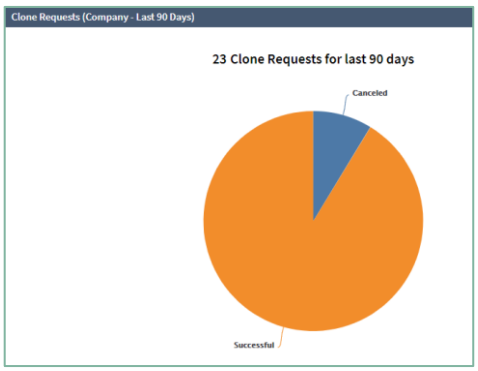
Continue to the next page.

Other widgets that fall under this category are:

CMDB Record Count — The breakout view is not available for this widget.



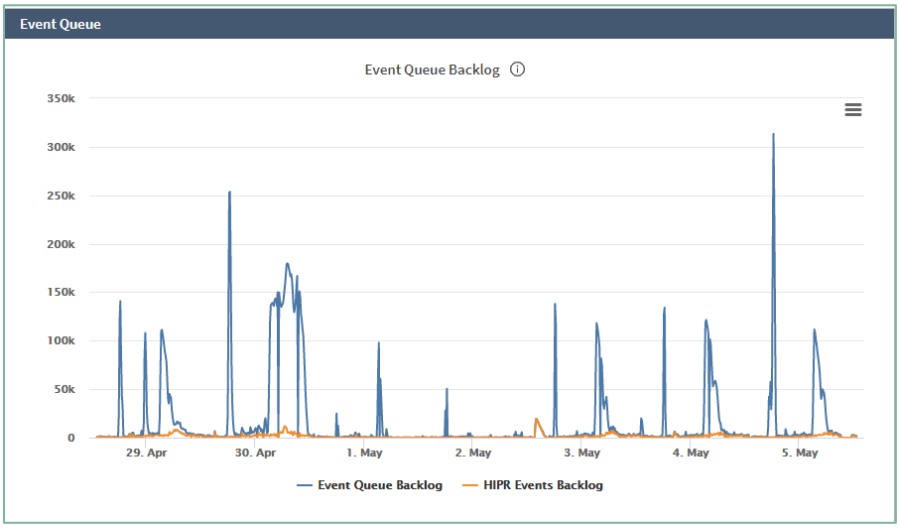
Clone Requests — Select the graph element to display the breakout view.



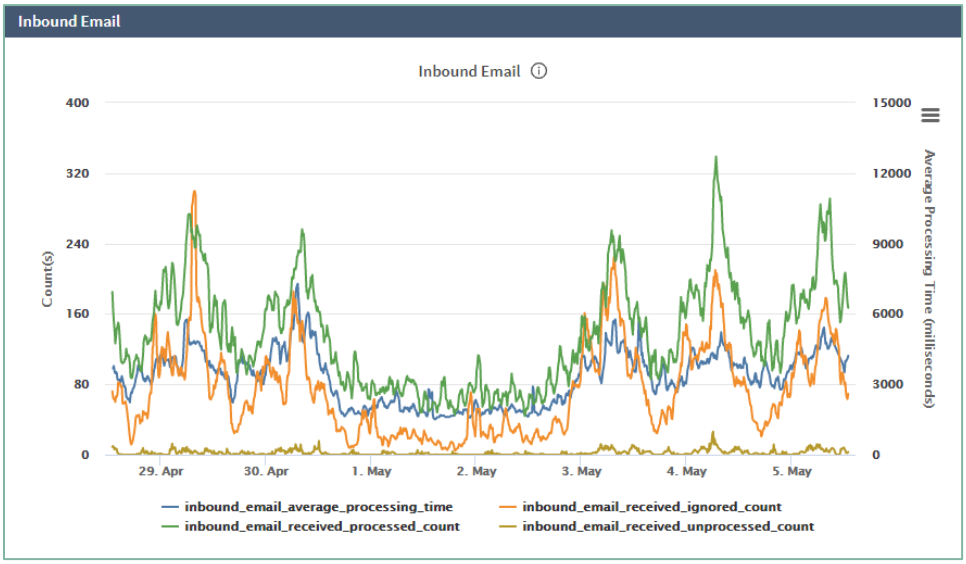
Buffer Pool — The breakout view is not available for this widget.

Currently, there are no detail breakout views or state conditions (i.e. green, yellow, or red) for these widgets.

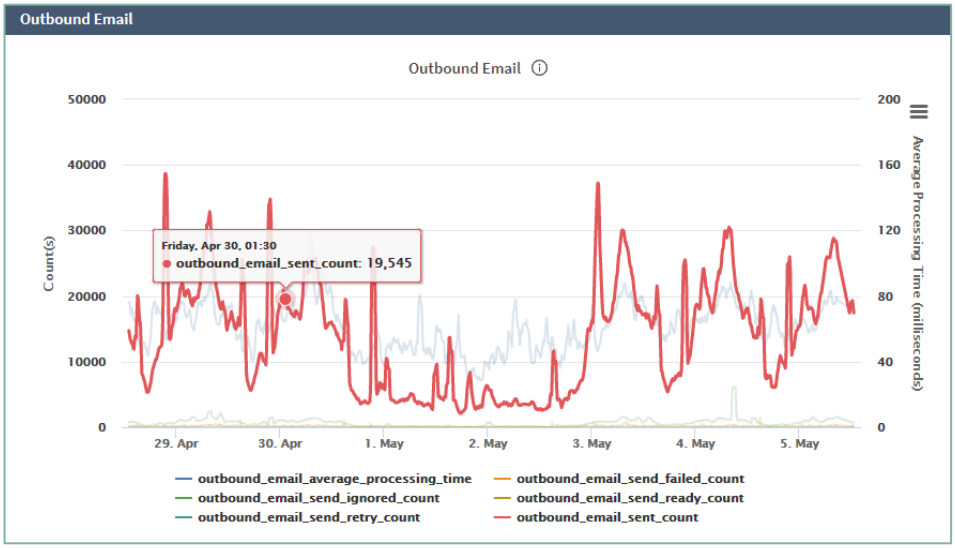
Event Queue Backlog— This is calculated by using queued size plus ready size metrics. The High Priority, or HIPR events, excludes the text index, metric updates and the report view.



Inbound Email— Provides metric values that represent the data for the past hour, so all counts are calculations for a rolling 60-minute window.



Outbound Email— Provides metric values that represent the data for the past hour, so all counts are calculations for rolling 60-minute window.

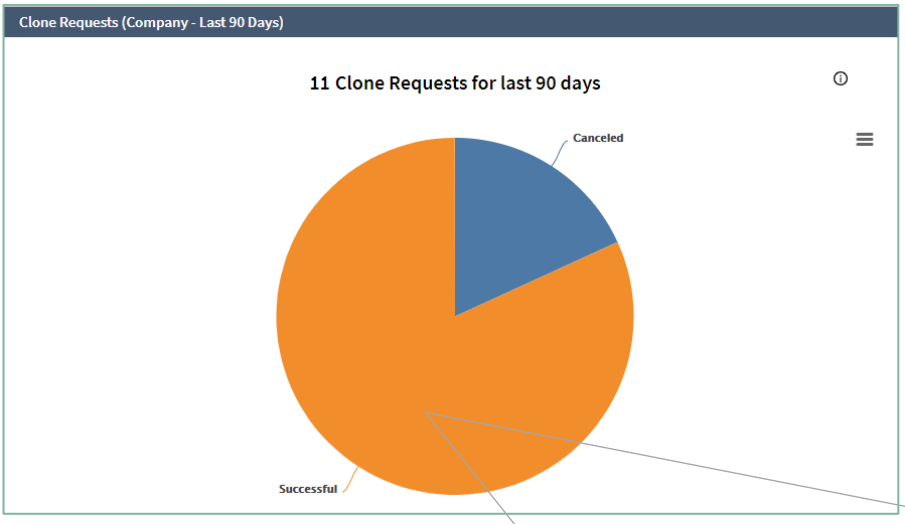


Continue to the next page.

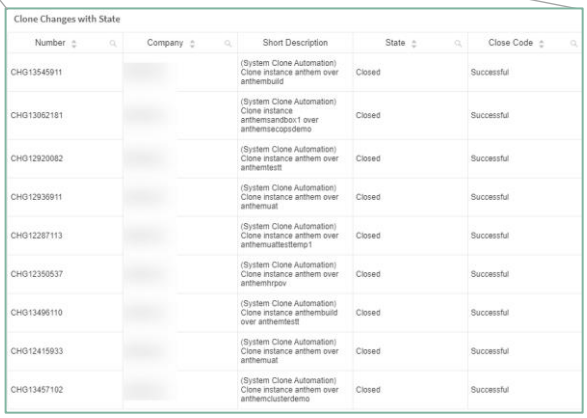
Clone Requests Pie Chart Functionality

When you select a pie piece for one of the states, the breakout will open filtered on that selection.

For example, this pie chart has a total of 11 clones in the last 90 days where nine were successful, and two were canceled.



If you select the successful clones on the pie piece, a breakout table will display the filtered list of the successful clones. You can view this data or download it. If you need to view the entire list data, select the widget title.



Try It

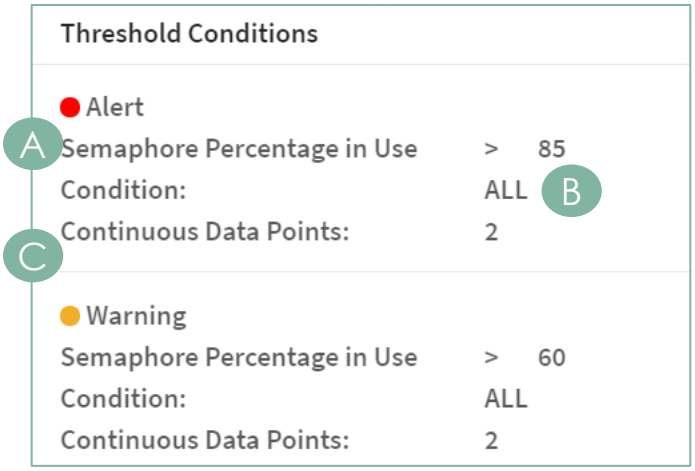
In the UAT:

1. Scroll down to the Clone Request pie chart.
2. Select a piece of the pie chart.
3. A table containing detailed data about that section of the chart displays.
4. Review the type of information that is presented in the table.
5. When you are finished, use the breakout options at the bottom of the screen to return to the main page.

Continue to the next page.

Reading the Threshold

If the color of the header is either red or yellow, you will need to address the severity of the alert described in the states section above. The following parameters together result in the state change.



A This is the first parameter of the severity that has the conditional statement. Usually, a greater or less than measurement result.

B Typically, this will be "All" meaning all metrics are considered.

C This identifies how many data points in a row must breach the configured trigger to result in a state change. For example, two continuous data point configurations mean that the metric result in the graph must breach the trigger configuration for two display points in a row on the graph.

Reflection Activity #2

Read each question and select the appropriate answer(s).

1. What is the conditional state of a widget based on?

- (●) The duration set for an instance
- ( ) The conditional state of the widget is based on a set threshold
- ( ) The aggregation interval for a specific instance

2. What do the yellow and red states indicate?

- (●) That there are no issues, and the instance is in good health
- ( ) That you will need to refresh the screen for updated information
- ( ) That there is a medium or high-level warning that requires attention

Submit

Never give out your password. Report abuse

Reflection Activity #3

Read each question and select the appropriate answer(s).

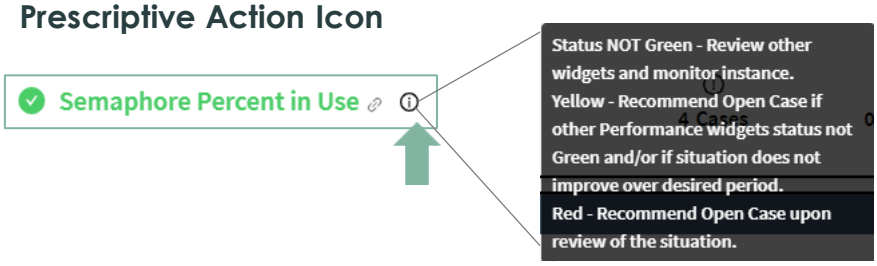
1. Which of the following are non-state widgets on the PAD? Select all that apply.

- [ ] Application events
- [ ] Semaphore
- [ ] Application health
- [ ] Read Replica
- [ ] Server Response Time
- [ ] Events processed

2. Explain what the Continuous Data Point threshold identifies.

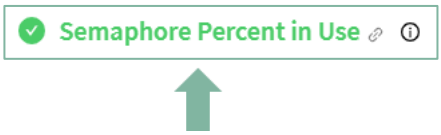
- ○ This identifies how many data points in a row must breach the configured trigger to result in a state change.
- ○ This is hte first parameter of the severity that has the conditional statement
- ○ Displays all metrics that are being considered during the calculation

Prescriptive Action Icon



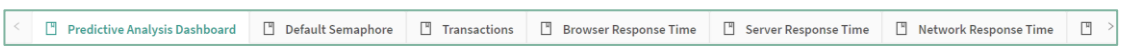
This is the circle-i link icon that is next to the widget title. Hovering over this will display the prescriptive measure to take. This information is based on the type of widget and may vary.

Breakout View



When you select the title within a state widget, the dashboard will redirect you to a larger display of your information for easier viewing and further analysis. This is considered the breakout view.

The breakout view is one of the tabs located at the bottom of the dashboard.

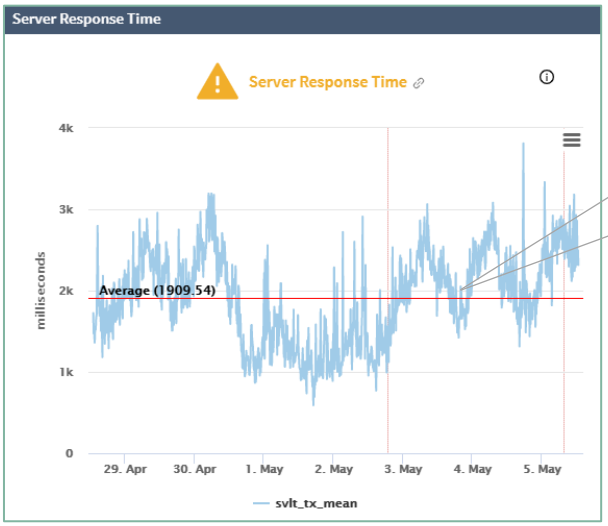


While in this view, you have access to the same features and functionality but with a larger screen (i.e. download, print, etc..).

Pay attention to the axis titles which compare the metrics to the threshold.

Graph

Most widgets will have a graphical display of the metrics that should correlate with the state of the widget. If the state is Yellow, then the graph should represent escalated metrics that identify the reason for the state change.

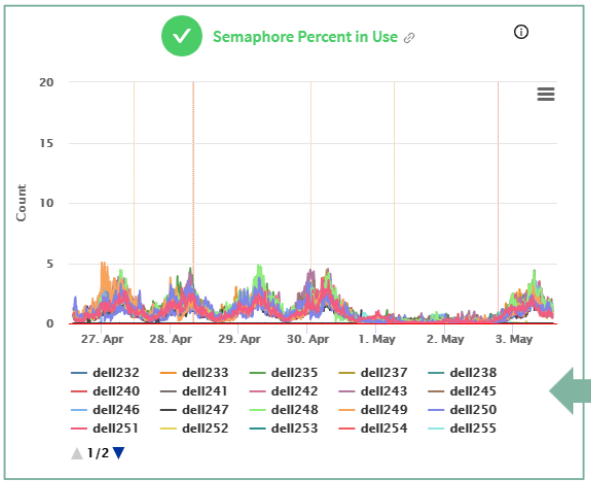


Placing your cursor over one of the elements in the graph will display the metrics and name of that element.

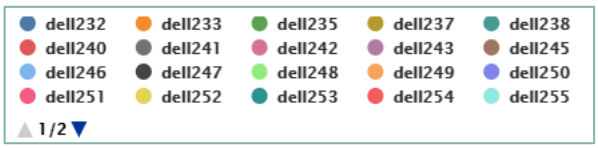
NOTE: If you have event controls configured and you can also see if the instance is experiencing a change, update the set or system alert. You may also see that a case could have been opened that might reference this issue close to the time frame.

Legend

The legend is located below the graph identifying the elements displayed.



The legend is selectable to toggle on or off the elements. If you right click on one of the items in the legend, you can isolate that one element or show them all.



The elements displayed are based on the type of metric. Some are node based, server based, instance based or specific to certain information. Keep in mind that not all widgets require a legend to display the metric.

Try It

In the UAT:

1. Locate the Legend on one of the graphs.
2. Depending on the graph you've chosen, right-click either the node, server, or instance to isolate one or more of the items.
3. Notice the changes that occur on the graph.

Continue to the next page.

Discuss with your mentor

You are now familiar with the features and functionality of the Predictive Analysis Dashboard. Take a moment to discuss the topics below with your mentor.

1. If I notice a trending issue that is yellow or red, which teams should I reach out to for assistance?
2. What is your process for reviewing the dashboard widgets to identify trending issues? Is it best to view each widget separately, or are there certain widgets that are directly related to others?
3. How frequently do you communicate with the customer regarding the performance of the instance?
4. If after review you determine a case could potentially be opened to address this, please consult this with your team's PAD SME.
    a. If a case is opened, ensure proper tagging is added (SAM:Proactive)
    b. Use (SAM:False) whn opening a case and it's determined no action is needed. [Refer to description icon on PAD main page)

Answer Key:
Page6 1) a & b 2) d
Page27 1) b 2)c
Page28 3) a,c,f 4)a